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Construction Memorandum

To: Distribution

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Subject: Proposed specifications for pavement markings

Over the past few years several changes have occurred in the area of pavement markings, both in the products available for striping and in what the Department requires for an end product. These changes have precipitated many changes in our specifications, creating many supplemental specifications and special provisions.

Temporary and interim pavement markings:

Environmental concerns and regulations encouraged us to replace high volatile content solvent borne pavement marking products with waterborne pavement marking products. Waterborne products have temperature limitations that lead us to include low volatile content pavement marking material for late season pavement marking applications. Although low VOC products were permitted, we did not specify a chemical composition and the specifications made no provision for price differences between waterborne and low VOC products when substitutions were made.

Minor errors in these specifications and the fact that they are located in different portions of the contract make them more difficult to work with.

Epoxy pavement markings:

At the national level there has been a movement to measure retro-reflectivity as one pavement marking performance characteristic. To gain experience, the Department developed the retro-reflective incentive/disincentive specification for epoxy markings. The original intent was to limit its use to projects having significant quantities and simple pavement marking configurations (i.e. solid and skip white and yellow). We also had limited equipment to measure retro-reflectivity and did not want to exceed our retro-reflectivity measuring capabilities until the Department made a decision to commit to expanding those capabilities.

However, the specification was incorporated into all projects rather than limiting its use as was originally intended and we have exceeded our capabilities.

Based on these and other concerns, the Department has drafted a supplemental specification that should make contracts and the administration of contracts having pavement markings a little simpler. Everything except for quality assurance on epoxy retro-reflectivity is included in the supplemental specification. Quality assurance for epoxy retro-reflectivity will be included by special provision on a project-by-project basis.

Revisions based on comments received are:

- Measurement by the gallon (liter) for all project types.
- Less restrictive glass bead specification to permit more contractor option.
- No bead application rate on temporary and interim pavement markings to permit contractor flexibility to meet the retro-reflectivity specifications when applicable.
- Increasing the grind depth for epoxy pavement markings from 20±10 mils to 30±10 mils.
- Retaining the 20 mil epoxy application rate and glass bead application rate.
- Quantity verification by measuring paint tanks.
- Provide a mechanism for changing paint product for temporary and interim striping for seasonal considerations.

These changes will impact design and field staff. Design crews will need to calculate quantities in liters and modify plans accordingly, effective with the November letting. When the supplemental specification is finalized, Contract Plans will convert kilometer quantities to liters for projects let prior to November, changing the method of measurement by special provision.

Inspectors will need to measure pavement marking quantities by taking tank readings on the application equipment. The project manager will have the authority to approve the material type used for temporary and interim striping.

LD:mb

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